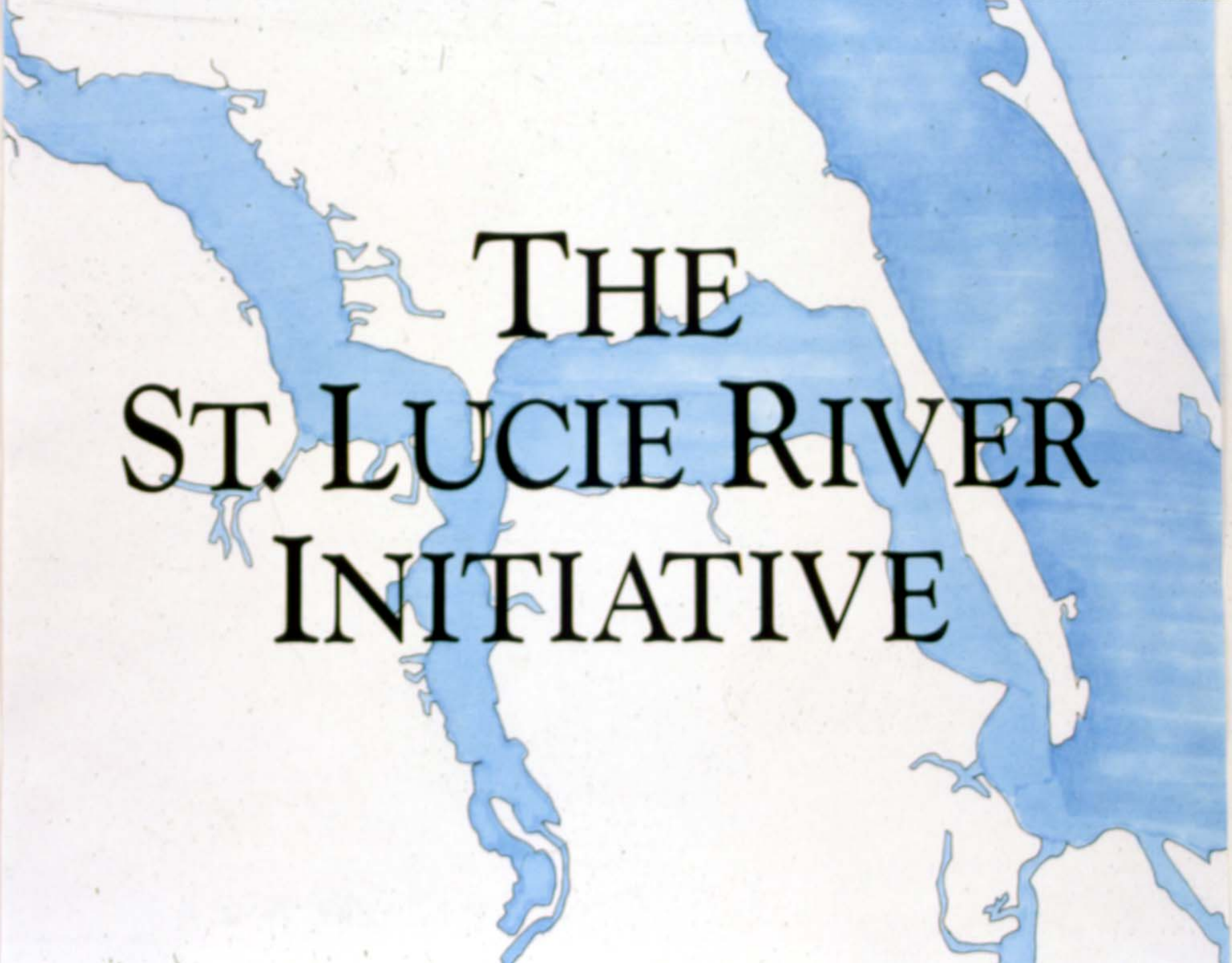
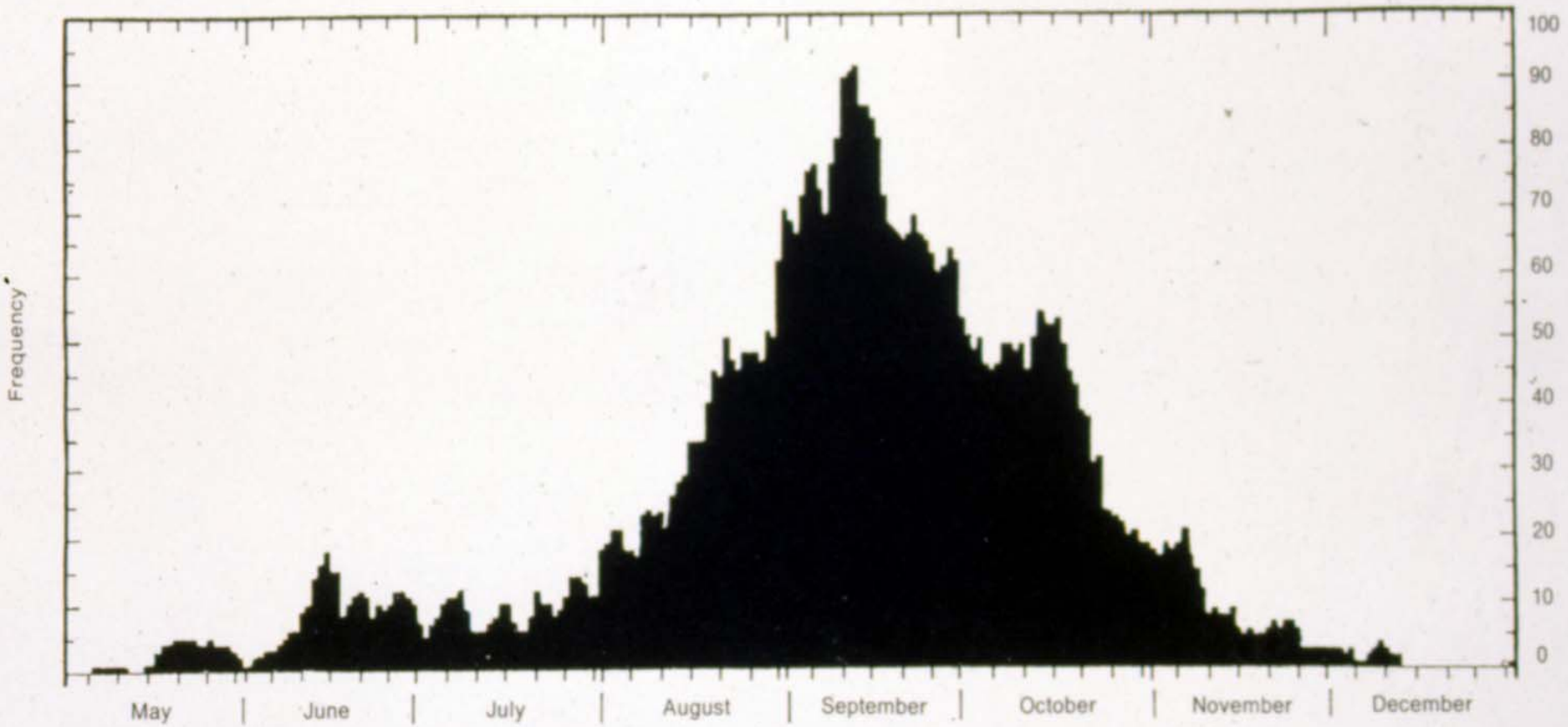


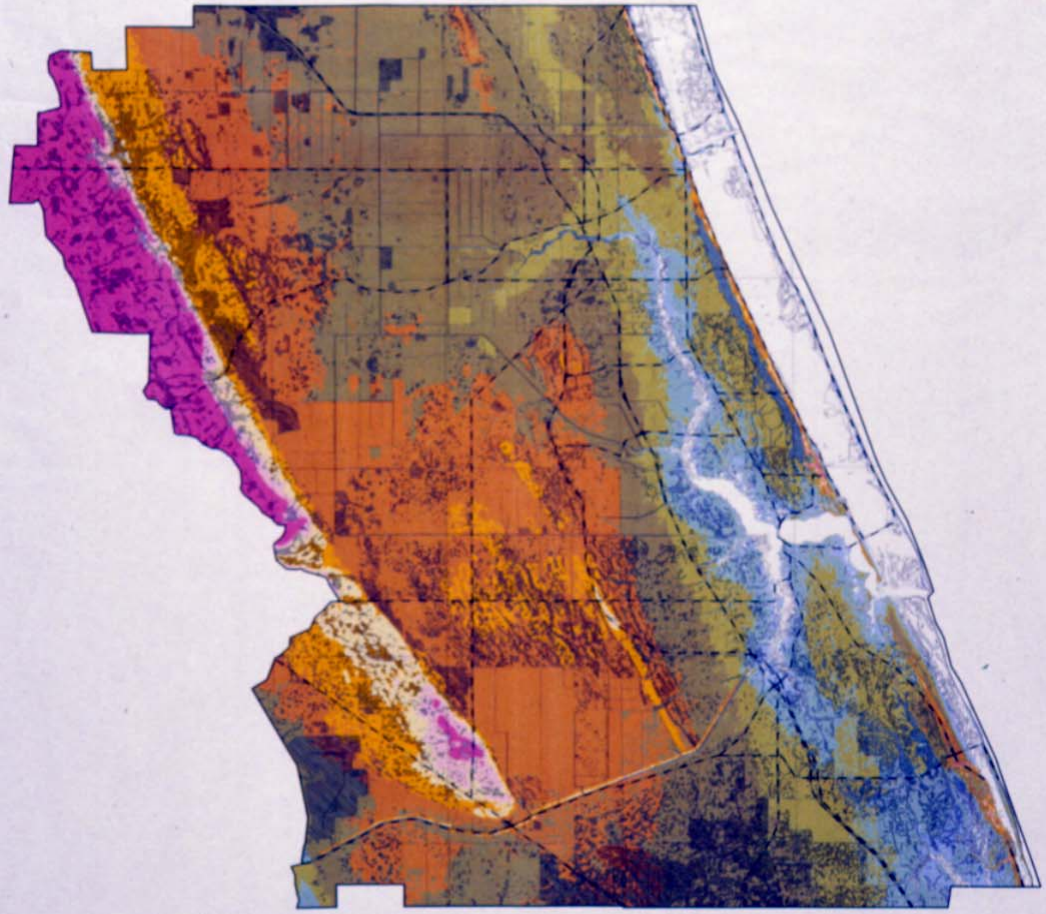
The St. Lucie River Initiative

Seasonality Of Tropical Storms and Hurricanes



Upper East Coast Planning Area

NWI Wetlands - USGS Topography

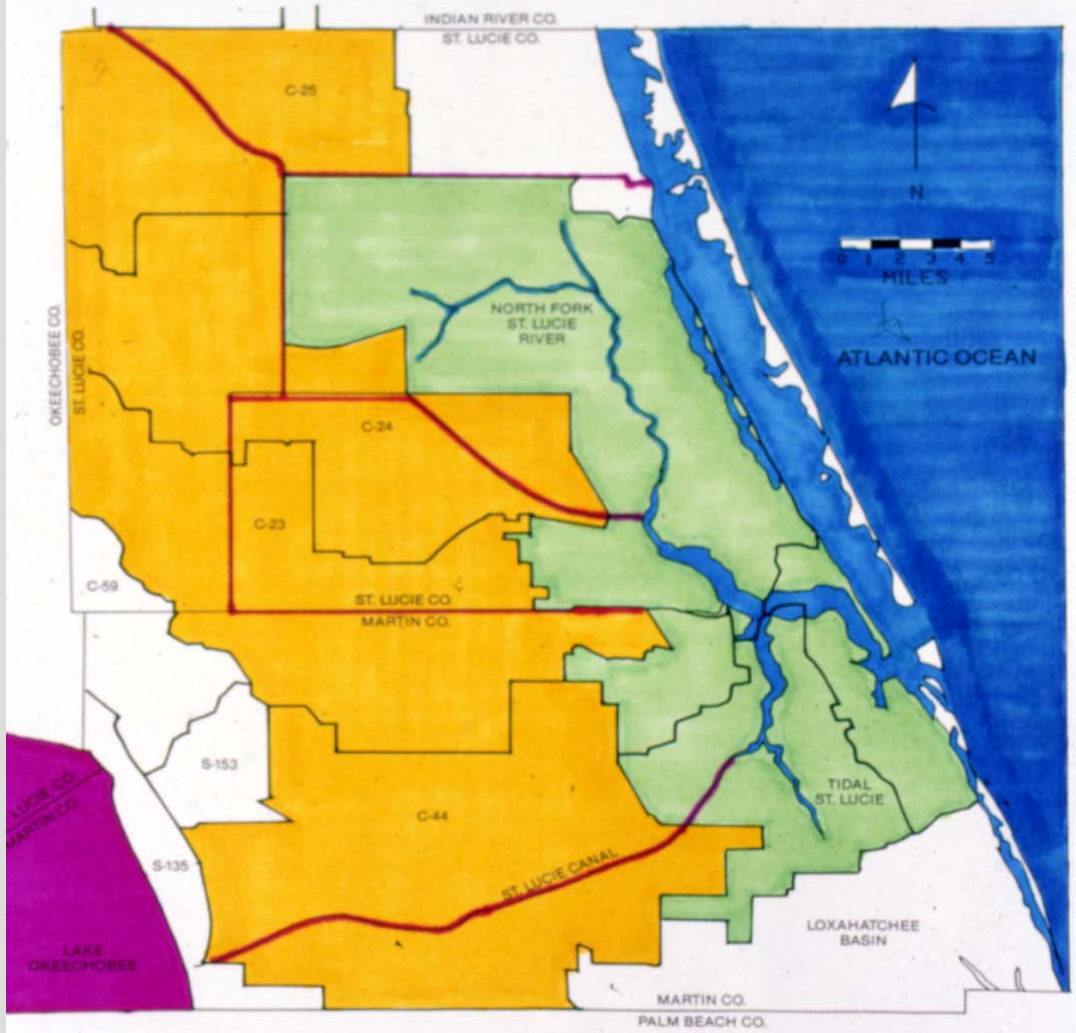


Legend

- National Wetlands Inventory wetlands
- 0 to 5 feet
- 5 to 10 feet
- 10 to 15 feet
- 15 to 20 feet
- 20 to 25 feet
- 25 to 30 feet
- 30 to 35 feet
- 35 to 40 feet
- 40 to 45 feet
- 45+ feet

0 1 2 3 4
Miles

St. Lucie Estuary: Tributaries and Drainage Basins



DIRECT DISCHARGES

MAJOR CANALS AND CONTROL STRUCTURES

SFWMD 1988

CANAL	OUTFALL CONTROL	DESIGN DISCHARGE cfs	PEAK REPORTED cfs	OUTFALL LOCATION
C-24	S-49 Gated Spillway	4,680	3,857	NORTH FORK
C-23	S-48 Gated Spillway	5,035	3,859	BESSEY CREEK; LOWER NORTH FORK
C-44	S-80 Gated Spillway & Locks	16,900	15,000	SOUTH FORK
Sum of Maximum Design Discharges cfs		26,615		

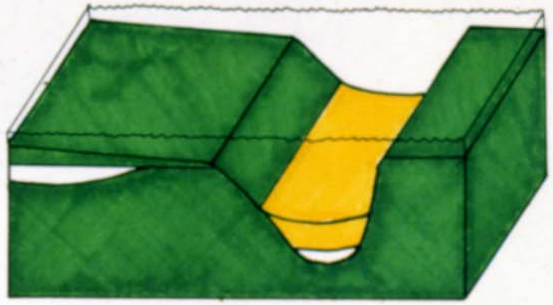
20,000 Years Ago

Sand

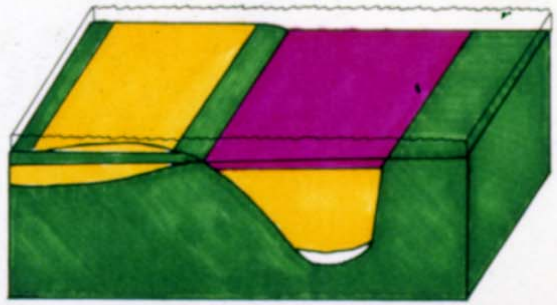
Muddy Sand

Sandy Mud

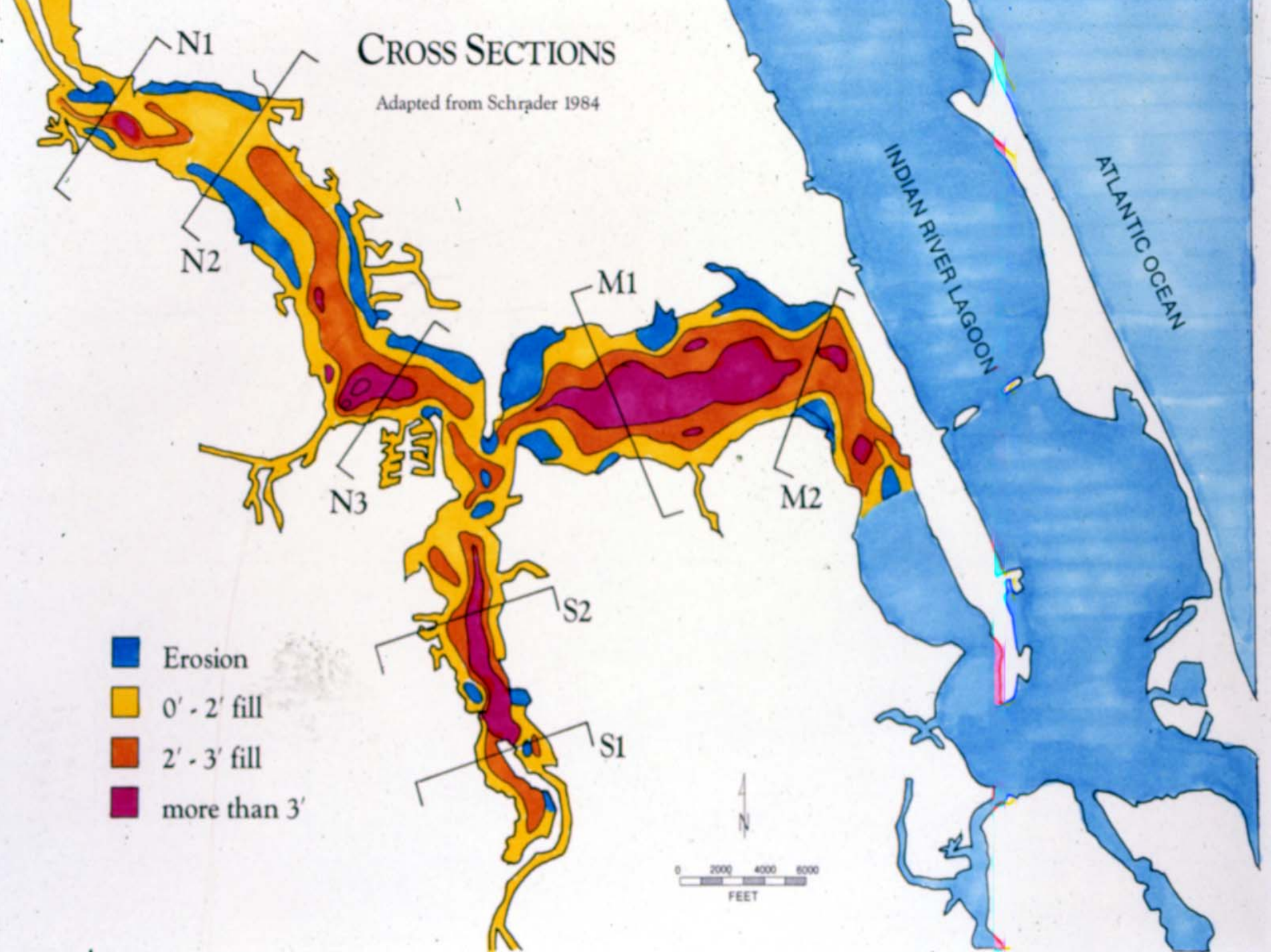
5,000 Years Ago



Present



Adapted from Schrader 1984

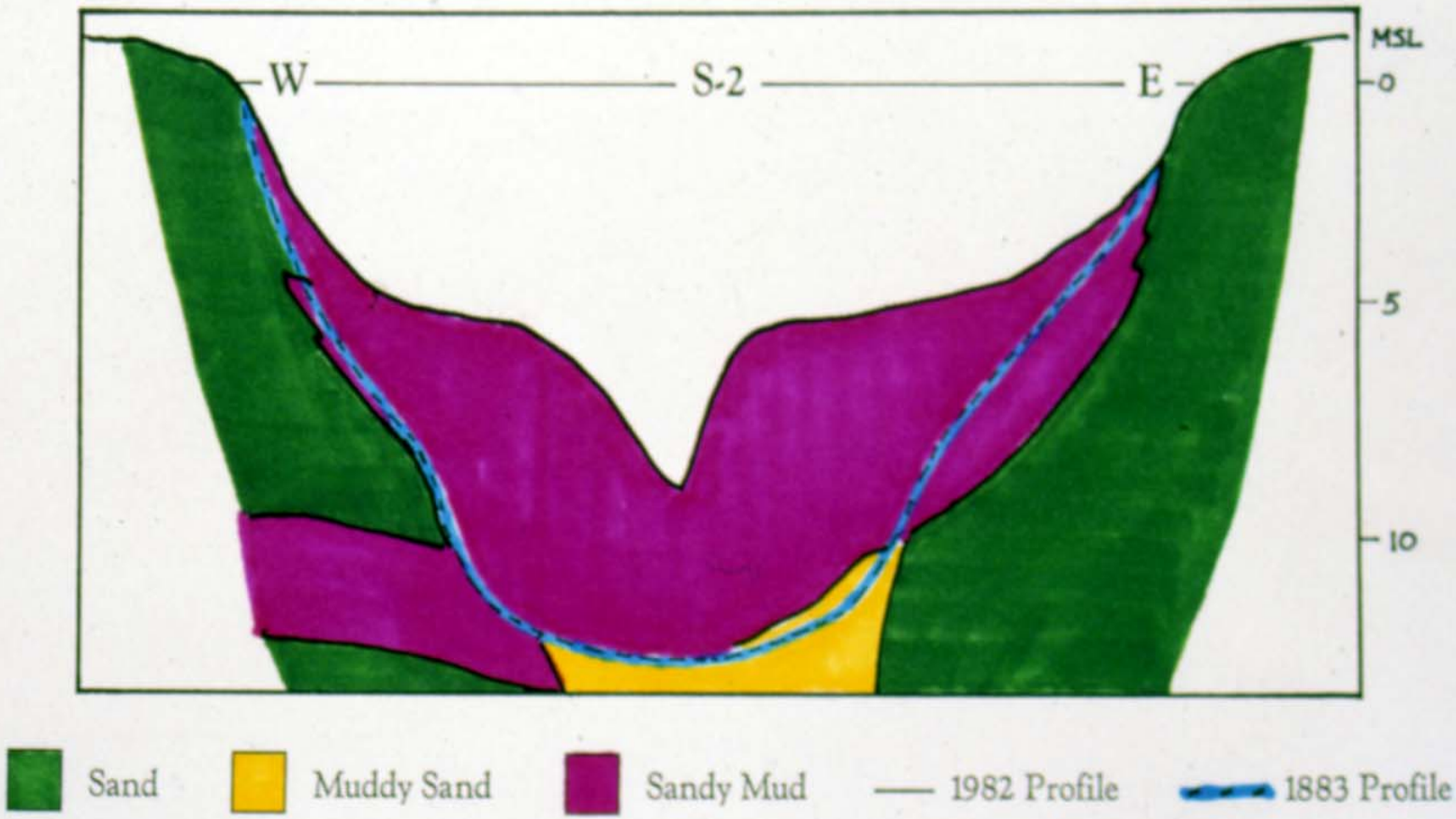

CROSS SECTIONS
Adapted from Schrader 1984
N1
N2
N3
M1
M2
S1
S2
INDIAN RIVER LAGOON
ATLANTIC OCEAN
Erosion
0' - 2' fill
2' - 3' fill
more than 3'
N
0
2000
4000
6000
FEET

Cross Section
South Side Palm City Bridge

Sand Muddy Sand Sandy Mud 1982 Profile 1883 Profile

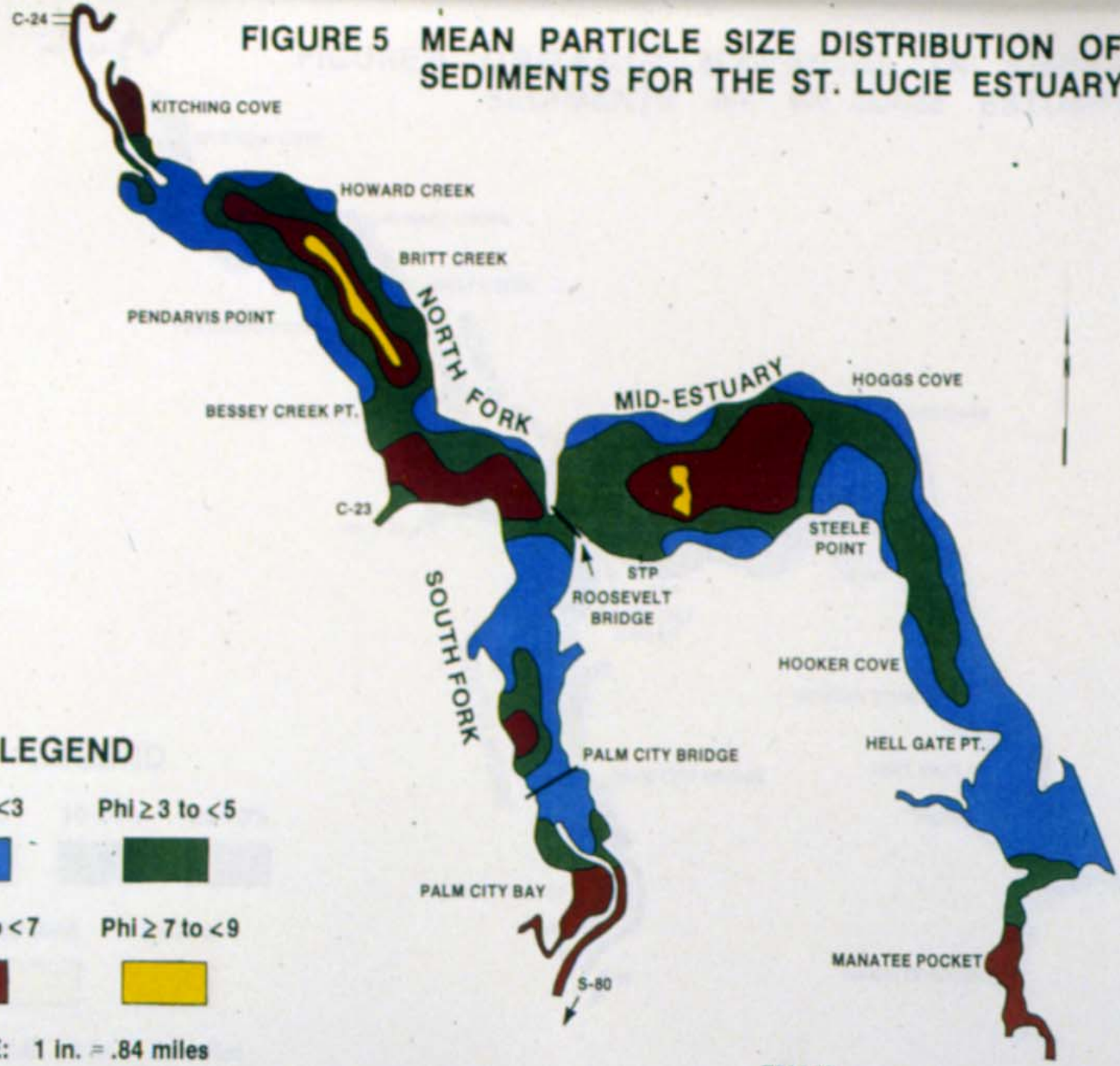
Adapted from Schneider 1984

Cross Section
Popleton Creek to Palm City



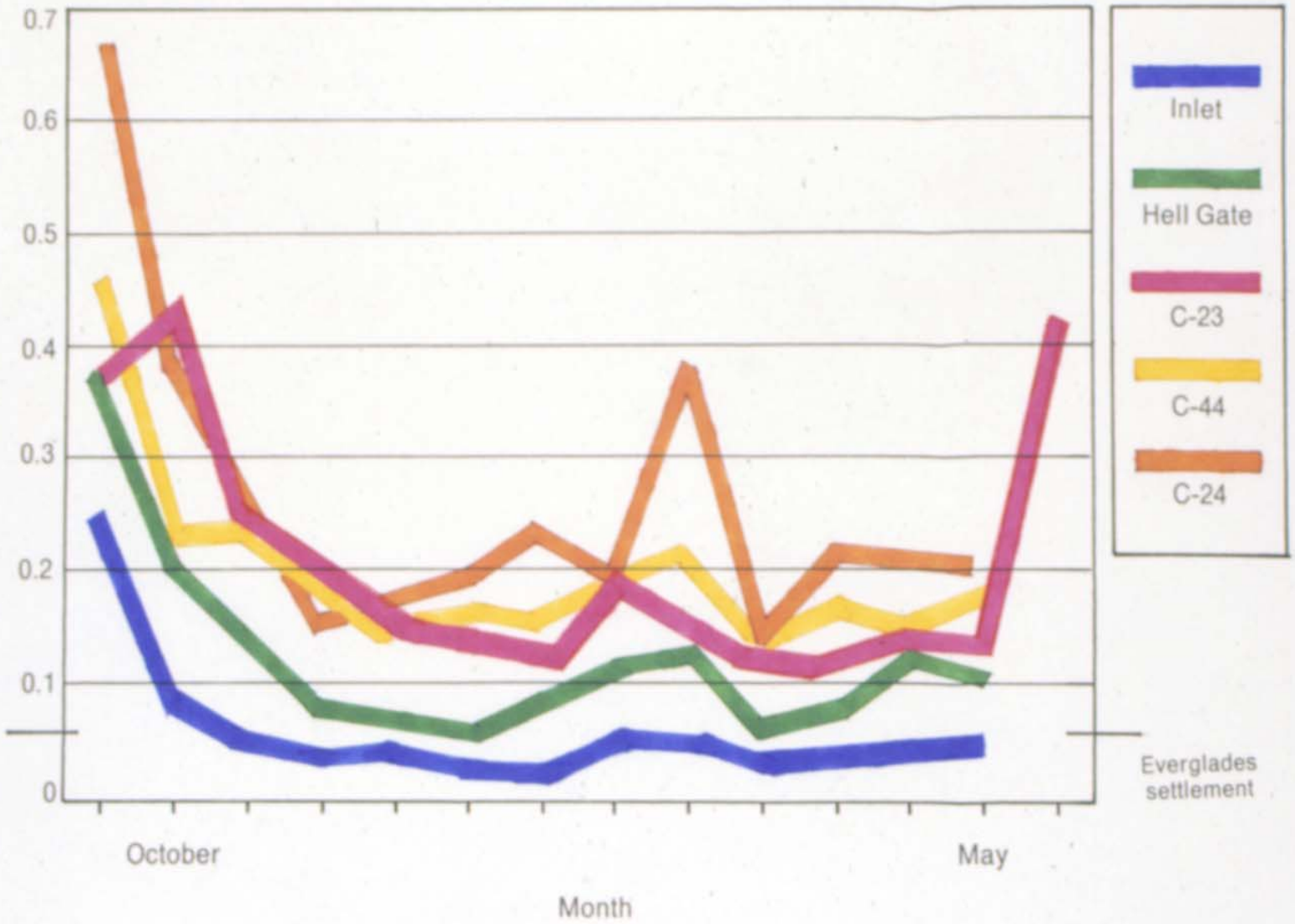
Adapted from Schrader 1984

FIGURE 5 MEAN PARTICLE SIZE DISTRIBUTION OF SURFACE SEDIMENTS FOR THE ST. LUCIE ESTUARY



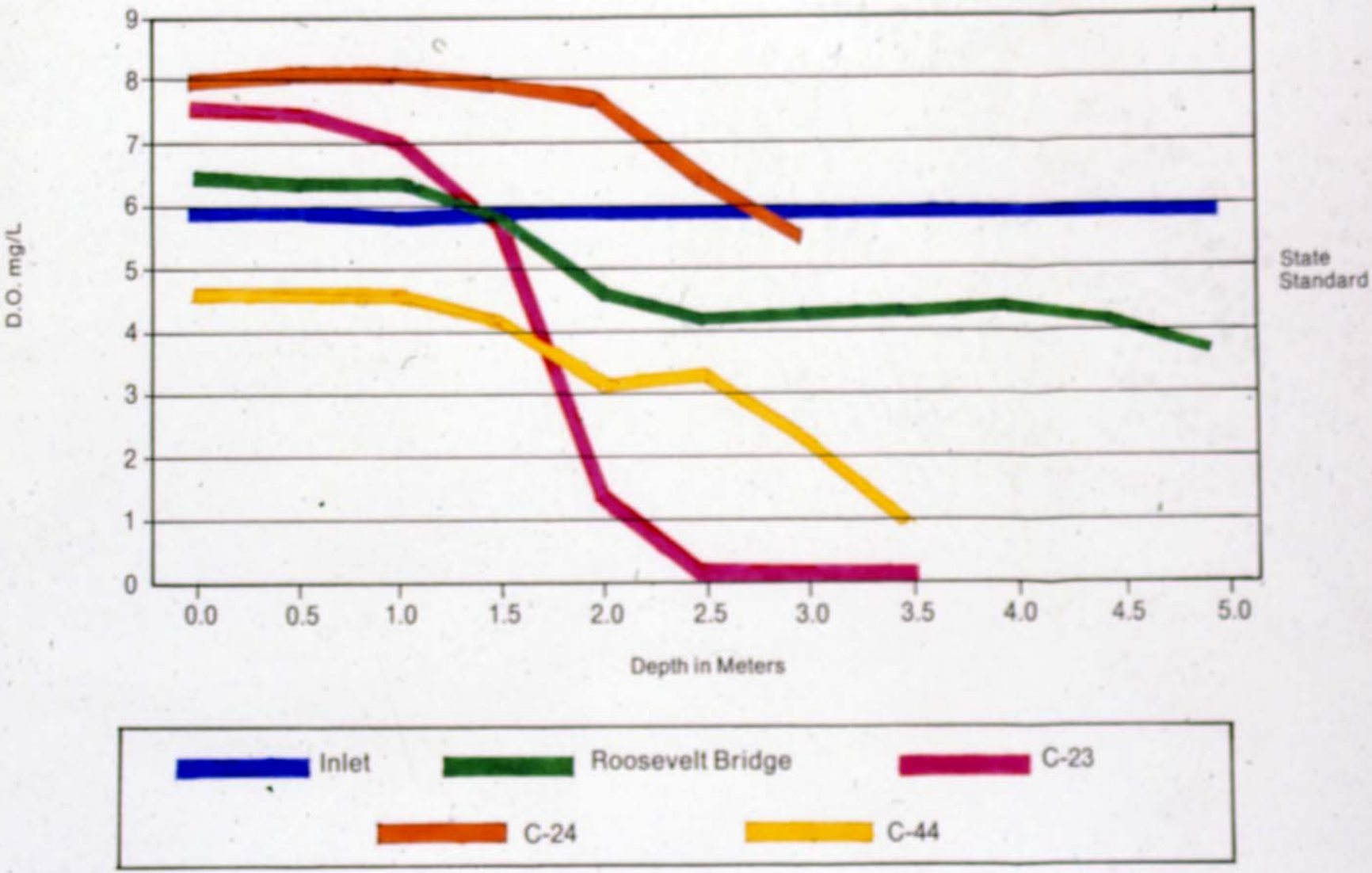
St. Lucie River

Total Phosphorus Series 10/90 to 5/91
(SFWMD Raw Data)

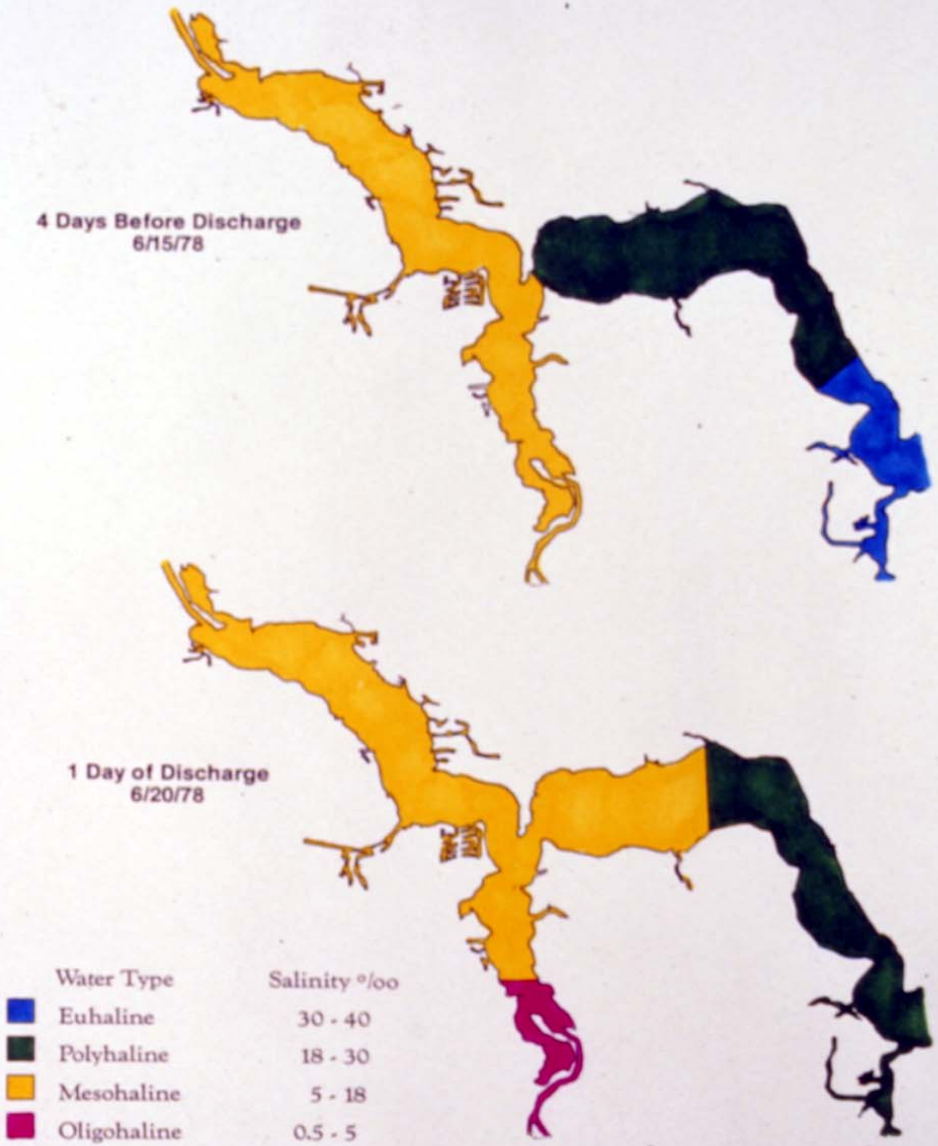


Dissolved Oxygen St. Lucie River

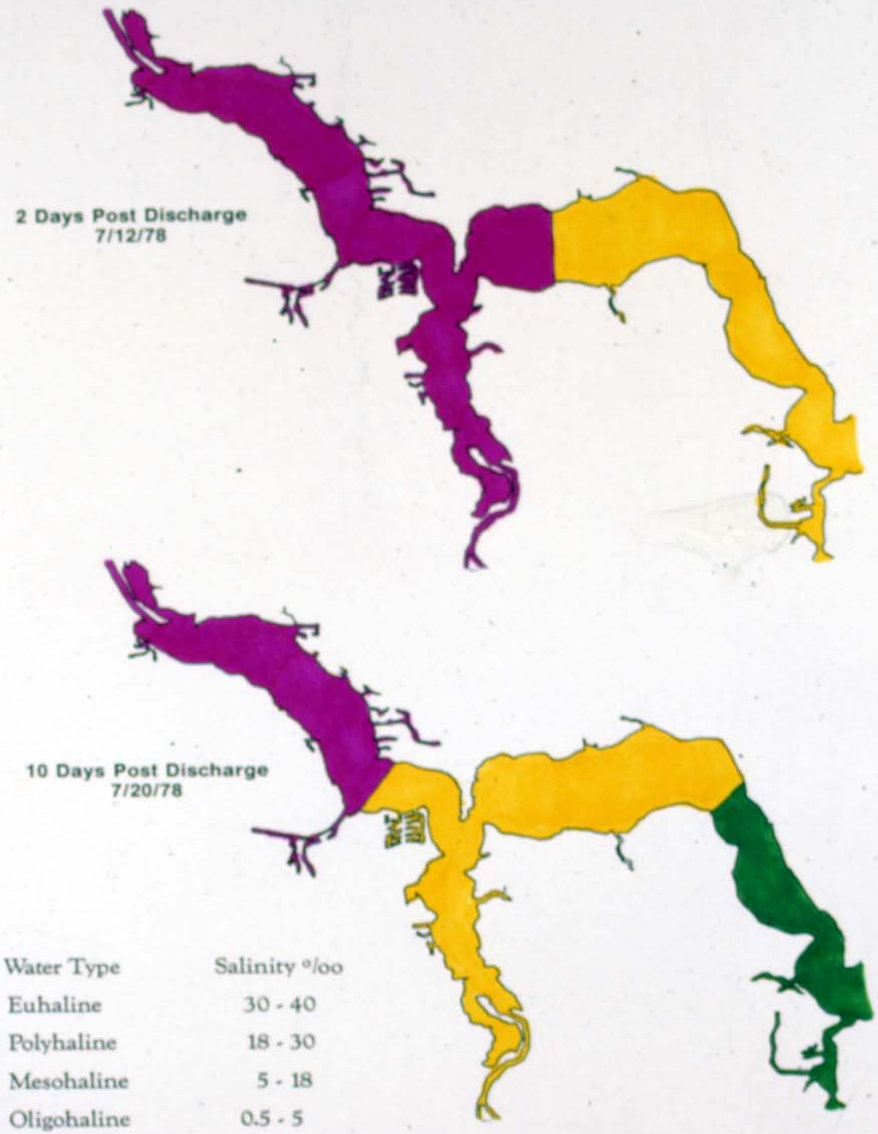
May 7, 1991
(SFWMD Raw Data)



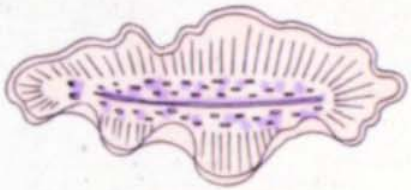
Salinity Zones
SFWMD 2,500 cfs DISCHARGE STUDY
1985

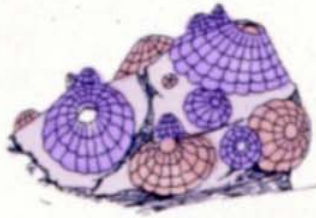


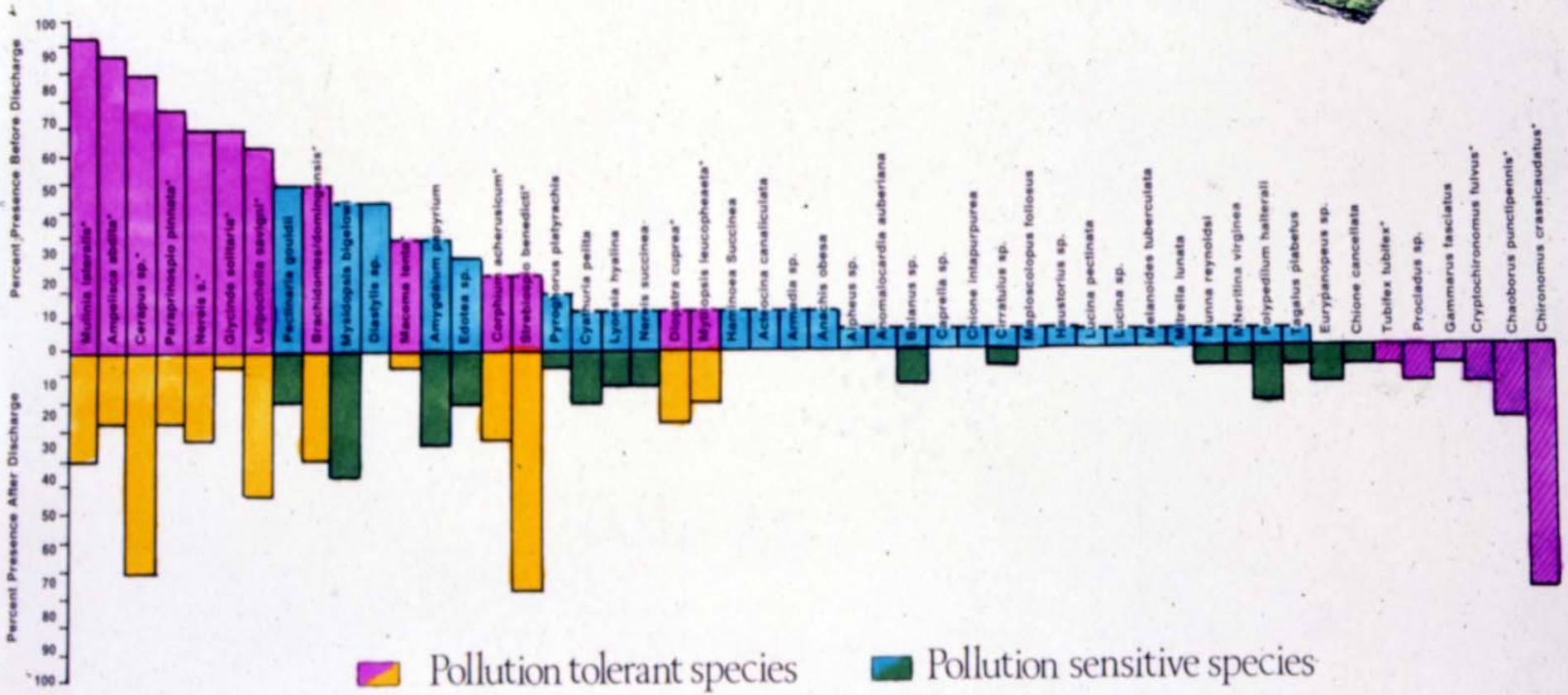
Salinity Zones
SFWMD 2,500 cfs DISCHARGE STUDY
1985



PERCENT PRESENCE OF BENTHIC SPECIES BEFORE AND AFTER THE 2500 cfs DISCHARGE





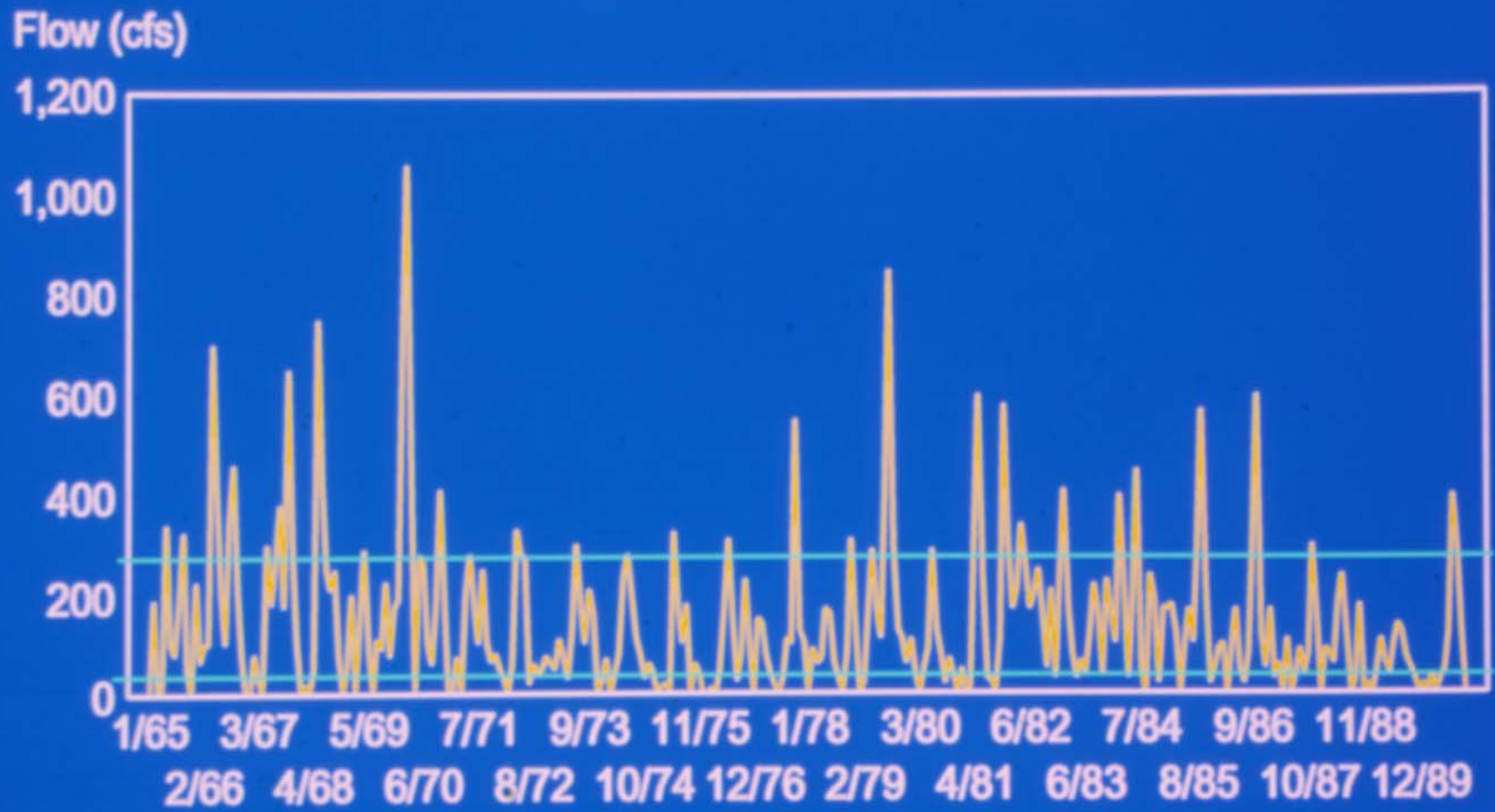


Pollution tolerant species

Pollution sensitive species

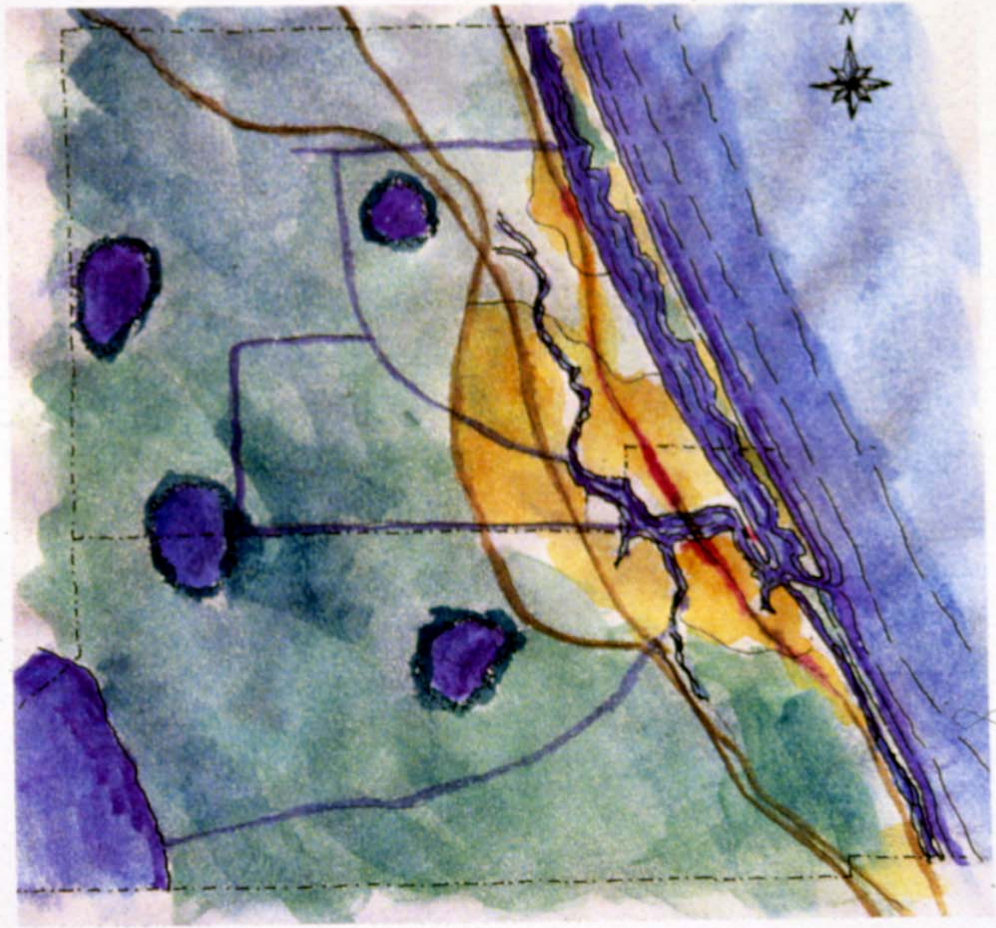
Freshwater Pollution tolerant species

C-23 Average Monthly Flow w/ Target Inflow Range



Regional Attenuation Facility Task Force

Draft Report
August 31, 1995




Coke

TABLE 2

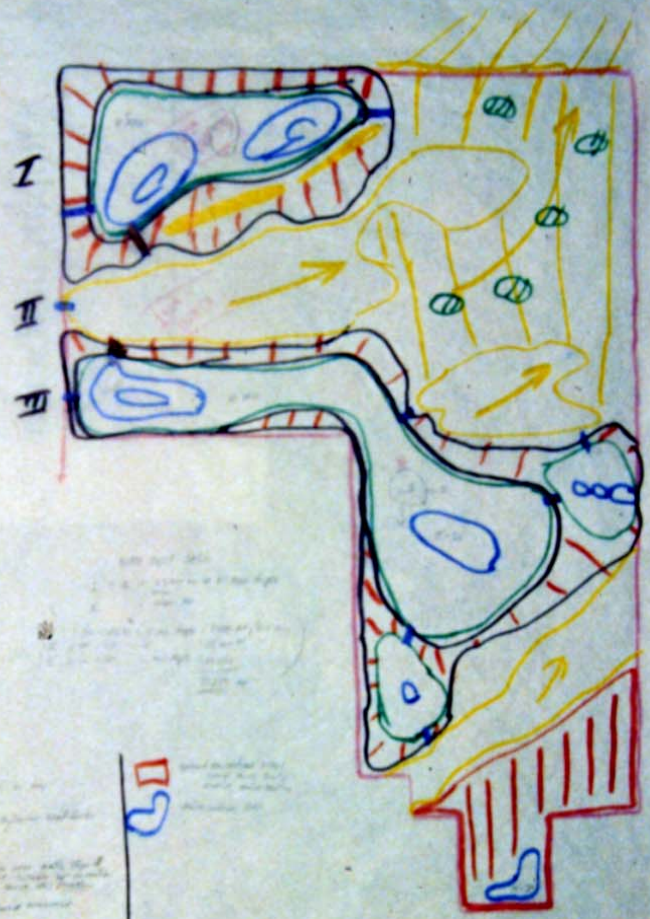



TABLE 2
TABLE 5
Allapattah Ranch
Key

Conclusion

- Adequate technical information exists to size and locate WPA's
- Sites are available (i.e. willing sellers)
- Original USACOE estimates appear high
- Most sites would pose some environmental impacts
- Those impacts must be mitigated

Conclusion (cont'd)

- Benefits have been under estimated
  Costs have been over estimated
- Efforts to improve Lake Okeechobee - Regulation schedule must continue
- Funding sources are available
- Time is right and time is of the essence

Recommendation

- Public comment should be solicited to reach consensus
- RAFTF Report should be modified and distributed
- Both Martin and St. Lucie County Commissions have extended the 90 day life of the Task Force and asked them to:
  - consider lease purchase options
  - solicit additional willing sellers
  - prepare potential funding arrangements
- Local, state and federal governments need to move forward with acquisition and construction

OPOSAL FOR MARTIN AND ST. LUCIE COUNTIES

PREPARED FOR:
Preserve Area Task Force
ah Ranch Committee
ie River Initiative
ny Corps of Engineers
Florida Water Management District

PREPARED BY:
Treasure Coast Regional Planning Council
and
Dover, Kohl & Partners, Urban Design
with the help of many citizens

ng the week of March 29 - April 5, 1996, citizens from Martin and St. Lucie Counties
joined by a team of federal, regional, and local water management experts and several
elected officials to conduct a design charrette. The purpose of this charrette was to
e a graphic and written record of the citizens' desires and aspirations for water preserve
(WPAs) in Martin and St. Lucie Counties.

e are large multipurpose water management areas designed to address the much needed
ge of fresh water now being released at unnatural volumes and rates to the St. Lucie
ary and Indian River Lagoon. Such releases are seriously degrading these natural
ems by upsetting the balance between salt and fresh water, accelerating the deposition
diments, and by reducing the amount of fresh water sheetflow into the ground.

primary purpose of WPAs proposed for Martin and St. Lucie Counties is to improve
alth of the Estuary and Lagoon. Other benefits from WPAs include: restoration sites
life habitat restoration; sediment removal; augmentation of minimum low flows
ng the dry season to improve estuarine resources; climatic benefits; aquifer recharge;
d protection; and, water supply.

1 2 3 4
Miles

- Trails / Paths
- Nature Trails
- Upland Vegetation
- Hardwood Slough
- Cleared Uplands
- Levees
- Littoral Zones
- Water Preserve Areas / Open Water
- Buffer / Treatment Marsh
- Restored Wetlands
- Wetland Vegetation
- Revegetated Marsh

1. The Village
   - Visitors' Center
   - Look-Out Towers
   - Ranger Station
   - Convenience Store
   - Bait and Tackle Store
   - Boat Launch
   - Restaurant
2. The Lodge
3. Youth Camp
4. The Ranch
5. Primitive Camping
6. Shelter / Pumping Station
7. Trail Head Parking